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UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA SAN JOSE DIVISION

IN RE: PERSONALWEB TECHNOLOGIES, LLC, ET AL. PATENT LITIGATION

Case No. <u>18-md-02834-BLF</u>

ORDER CONSTRUING CLAIMS IN U.S. PATENT NOS. 6,928,442; 7,802,310; 7,945,544; 8,099,420

[Re: ECF 406, 412, 420]

In this multidistrict litigation ("MDL"), PersonalWeb Technologies, LLC ("PersonalWeb") alleges patent infringement by Amazon.com, Inc. and Amazon Web Services, Inc., and separately by dozens of Amazon's customers, related to the customers' use of Amazon's Simple Storage Service ("S3") in connection with downloading files from S3. Two of the cases comprising this MDL are proceeding at this time: Amazon v. PersonalWeb (Case No. 5:18-cv-00767-BLF), in which PersonalWeb asserts counterclaims of patent infringement, and PersonalWeb v. Twitch Interactive, Inc. (Case No. 5:18-cv-05619-BLF), in which PersonalWeb asserts claims of patent infringement and which the Court has designated as a representative customer case.

In each of these two actions, PersonalWeb alleges infringement of four patents, all of which are at issue in the present claim construction dispute: U.S. Patent Nos. 6,928,442 ("the '442 patent"); 7,802,310 ("the '310 patent"); 7,945,544 ("the '544 patent"); and 8,099,420 ("the '420 patent"). PersonalWeb filed an opening claim construction brief (ECF 406); Amazon.com, Inc., Amazon Web Services, Inc., and Twitch, Interactive, Inc. (collectively, "Amazon") filed a joint responsive brief (ECF 412); and PersonalWeb filed a reply brief (ECF 420). The Court held a tutorial on May 2, 2019 and a *Markman* hearing on May 24, 2019 ("the Hearing") for the purpose of construing ten disputed terms in the above listed patents.

I. BACKGROUND

All four patents-in-suit share a specification and each claims priority to a patent application filed on April 11, 1995. The '310 patent is titled "Controlling Access to Data in a Data Processing System" and was issued on September 21, 2010. Ex. 1 to Thompson Decl. ("'310 patent"), ECF 406-2. The '420 patent is titled "Accessing Data in a Data Processing System" and was issued on January 17, 2012. Ex. 7 to Thompson Decl. ("'420 patent"), ECF 406-8. The '544 patent is titled "Similarity-Based Access Control of Data in a Data Processing System" and was issued on May 17, 2011. Ex. 9 to Thompson Decl. ("'544 patent"), ECF 406-10. The '442 patent is titled "Enforcement and Policing of Licensed Content using Content-Based Identifiers" and was issued on August 9, 2005. Ex. 12 to Thompson Decl. ("'442 patent"), ECF 406-13.

The patents-in-suit generally relate to methods for identifying data items in a data processing system—for example, methods for efficiently naming and identifying files on a computer network. According to the (shared) specification, the problems with prior art systems include that "[t]he same [file] name in two different [folders] may refer to different data items, and two different [file] names in the same [folder] may refer to the same data item." *See* '310 patent at 2:41–43. To address this problem, the patents-in-suit produce a content-based "True Name" identifier for a file or other particular data item, in an effort to ensure that identical file names refer to the same data, and conversely, that different file names refer to different data. *See id.* at 6:20–41, 34:4–12, 37:48–53. Put differently, the invention provides an identity for a given data item that "depends on all of the data in the data item and only on the data in the data item." *See id.* at 3:54–55. "Thus the [True Name] identity of a data item is independent of its name, origin, location, address, or other information not derivable directly from the data, and depends only on the data itself." *See id.* at 3:55–58.

The specification states that "[a] True Name is computed using a [hash] function . . . which reduces a data block B . . . to a relatively small, fixed size identifier, the True Name of the data block, such that the True Name of the data block is virtually guaranteed to represent the data block B and only data block B." '310 patent at 12:21–26. Larger files may be split into smaller segments. *See id.* at 13:45–49. The hash function is applied to each segment, and the resulting

values are strung together into an indirect data item. *See id.* at 13:49–54. The True Name of this indirect data item is then computed and becomes the True Name of the larger file. *See id.* at 13:54–59.

The summary of the invention describes multiple uses for these True Names, including (1) to avoid keeping multiple copies of a given data file, regardless of how files are otherwise named; (2) to avoid copying a data file from a remote location when a local copy is already available; (3) to access files by data name without reference to file structures; (4) to maintain consistency in a cache of data items and allow corresponding directories on disconnected computers to be resynchronized with one another; (5) to confirm whether a user has a particular piece of data according to its content, independent of the name, date, or other properties of the data item; and (6) to verify that data retrieved from a remote location is the intended data. *See* '310 patent at 4:1–52. The patents-in-suit are directed to various specific aspects of this system.

II. LEGAL STANDARD

Claim construction is a matter of law. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 387 (1996). "It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude," *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (internal citation omitted). As such, "[t]he appropriate starting point . . . is always with the language of the asserted claim itself." *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1186 (Fed. Cir. 1998).

Claim terms "are generally given their ordinary and customary meaning," defined as "the meaning . . . the term would have to a person of ordinary skill in the art in question . . . as of the effective filing date of the patent application." *Phillips*, 415 F.3d at 1313 (internal citation omitted). The court reads claims in light of the specification, which is "the single best guide to the meaning of a disputed term." *Id.* at 1315; *see also Lighting Ballast Control LLC v. Philips Elecs.*N. Am. Corp., 744 F.3d 1272, 1284–85 (Fed. Cir. 2014) (en banc). Furthermore, "the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim." *Phillips*, 415 F.3d at 1316 (quoting *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed.

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Cir. 1998)). The words of the claims must therefore be understood as the inventor used them, as such understanding is revealed by the patent and prosecution history. *Id.* The claim language, written description, and patent prosecution history thus form the intrinsic record that is most significant when determining the proper meaning of a disputed claim limitation. *Id.* at 1315–17; see also Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996).

Evidence external to the patent is less significant than the intrinsic record, but the court may also consider such extrinsic evidence as expert and inventor testimony, dictionaries, and learned treatises "if the court deems it helpful in determining 'the true meaning of language used in the patent claims." *Philips*, 415 F.3d at 1318 (quoting *Markman*, 52 F.3d at 980). However, extrinsic evidence may not be used to contradict or change the meaning of claims "in derogation of the 'indisputable public records consisting of the claims, the specification and the prosecution history,' thereby undermining the public notice function of patents." Id. at 1319 (quoting Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1578 (Fed. Cir. 1995)).

III. AGREED CONSTRUCTIONS

The parties agree on the construction of five terms. Revised Joint Claim Construction and Prehearing Statement at 2, ECF 430; see id. at Appendix A. The Court approves and adopts the parties' agreed-upon constructions as follows:

Claim Term	Agreed-Upon Construction
"data item"	"sequence of bits"
('310 patent, claim 20) ('420 patent, claims 25, 166)	
"data file(s)"	"a named data item"
('442 patent, claim 10)	
"wherein the particular file comprises a first one or more parts"	"wherein the particular file is made up of a first one or more separate sequences of bits"
('544 patent, claim 46)	

"wherein each file of the plurality of files comprises a corresponding one or more parts"	"wherein each file of the plurality of files is made up of one or more corresponding separate sequences of bits"
('544 patent, claim 52)	"plurality" means "two or more"
"database"	"an organized electronic collection of data"
('544 patent, claims 46, 52, 55)	

IV. DISCUSSION

The Court discusses in turn the ten disputed terms that appear in the four patents-in-suit.

A. Disputed "authorization" and "licensing" terms in the '310 and '420 patents

The parties dispute two analogous terms in the '310 and '420 patents, respectively:

"unauthorized or unlicensed" (in claim 20 of the '310 patent) and "authorization" (in claims 25 and 166 of the '420 patent). Claim 20 of the '310 patent recites:

20. A computer-implemented method operable in a system which includes a plurality of computers, the method comprising:

controlling distribution of content from a first computer to at least one other computer, in response to a request obtained by a first device in the system from a second device in the system, the first device comprising hardware including at least one processor, the request including at least a content-dependent name of a particular data item, the content-dependent name being based at least in part on a function of at least some of the data comprising the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items will have the same content-dependent name,

based at least in part on said content-dependent name of said particular data item, the first device (A) permitting the content to be provided to or accessed by the at least one other computer if it is not determined that the content is **unauthorized or unlicensed**, otherwise, (B) if it is determined that the content is **unauthorized or unlicensed**, not permitting the content to be provided to or accessed by the at least one other computer.

'310 Patent at 39:8–31 (emphasis added).

With respect to the '420 patent, claim 25 is representative and recites:

- 25. A computer-implemented method implemented at least in part by hardware in combination with software, the method comprising the steps:
 - ... selectively allowing a copy of the particular sequence of bits to be provided to or accessed by or from at least one of the computers in a network of computers, wherein a copy of the sequence of bits is not to be provided or accessed with **authorization**, as determined, at least in part, based on whether or not said first content-dependent name of the particular sequence of bits corresponds to one of the plurality of identifiers.

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'420 Patent at 40:9–39 (emphasis added). Each term is discussed in turn.

"unauthorized or unlicensed" (claim 20 of '310 patent)

PersonalWeb's Proposal	Amazon's Proposal	Court's Construction
Plain and ordinary meaning	"not compliant with a valid license"	"not compliant with a valid license"
Alternatively: "not permitted or not permitted under a license" 1		

PersonalWeb contends that in the context of the '310 patent, the plain and ordinary meaning of "authorization" equates to "permission." See Opening Br. at 1, ECF 406. In support, PersonalWeb argues that "the specification includes several examples of certain exemplary embodiments of the inventive system permitting, or not permitting, certain actions to take place on the basis of [] given criteria." See id. at 1–2. PersonalWeb next contends that a "license" is something narrower—"a specific kind of authorization." See id. at 2. PersonalWeb's theory is that "the [] term 'unlicensed' is a specific species of the genus 'unauthorized'" and that the '310 patent additionally contemplates restricting more general unauthorized transactions on a basis that is not license-dependent. See id. at 4–5.

In its opening brief, PersonalWeb discusses two purported examples of general, genus level authorizations. First, PersonalWeb points out "that a 'region' (directory) can be set as readonly, meaning another computer would not have permission to change the contents of the region." Id. at 2; see '310 Patent at 10:23–35. Second, PersonalWeb states that "[t]he specification also discusses that a file can be locked so that another computer does not have permission to modify it." Opening Br. at 2; see '310 Patent at 20:19–22. Therefore, PersonalWeb argues, Amazon's proposed construction is improper because it "expressly reads [the broader word] 'unauthorized' out of the claim," contrary to canons of construction that indicate separate words should be given separate meanings. See id. at 4 (citing Merck & Co. v. Teva Pharms. USA, Inc., 395 F.3d 1364, 1372 (Fed. Cir. 2005) and other cases).

Amazon counters that the patents-in-suit "treat 'unauthorized or unlicensed' as a single

Alterative construction as modified by PersonalWeb at the Hearing. See Hearing Tr. at 8:16-9:13, ECF 446.

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concept that relates to a fundamental purpose of the claimed invention—policing access to licensed content." See Responsive Br. at 5, ECF 412. Amazon argues that the '310 patent specification "repeatedly treats the concept of 'licensed' use of content as interchangeable with whether that use is 'authorized.'" See id. at 5. As an illustrative example pointed out by Amazon, see id., the specification states that "[t]he True Name provides a safe way to identify licensed material" and goes on to describe "[e]nforcing use of valid licenses . . . for example, by creating a report of users who do not have proper authorization," see '310 Patent at 31:3–12. Amazon further argues that PersonalWeb's two purported examples of unauthorized transactions that are not license-dependent are merely "conventional techniques for preventing computers from making inconsistent changes to the same data at the same time . . . [and have] nothing to do with 'authorizing' access to content." See Responsive Br. at 7.

In addition, Amazon points out that in prior litigation involving the '310 patent, '420 patent, and '442 patent, Judge Gilstrap in the Eastern District of Texas construed the term "authorized" as used in claims 1, 2, and 16-19 of the '310 patent to mean "compliant with a valid license." See Responsive Br. at 8 (citing and quoting PersonalWeb Techs., LLC v. IBM Corp., No. 6:12-cv-661-JRG, Dkt. No. 103 at 25, 28 (E.D. Tex. Mar. 11, 2016) ("Gilstrap Order"), Ex. 5 to Hadden Decl., ECF 412-6). Similarly, Judge Gilstrap construed "unauthorized" as used in claims 7 and 23 of the '442 patent to mean "not compliant with a valid license." See Gilstrap Order at 26, 28. Judge Gilstrap also construed "unlicensed" as used in claims 7 and 23 of the '442 patent to mean "invalid rights to content." See id. at 21, 25. Thus, Amazon argues, Judge Gilstrap "recognized that licensing and authorization are the same concept in the patents, and provided the correct construction for these terms." See Responsive Br. at 8.

For the reasons discussed below, the Court agrees with Amazon that "unauthorized or unlicensed" as used in claim 20 of the '310 patent refers to the single concept of regulating access to licensed content. Accordingly, the Court adopts Amazon's proposed construction for this term.

As an initial matter, the Court recognizes the general principle that "[a] claim construction

² As well as U.S. Patent No. 6,415,280, which is not asserted in the instant action.

that gives meaning to all the terms of the claim is preferred over one that does not do so." Merck
& Co. v. Teva Pharms. USA, Inc., 395 F.3d 1364, 1372 (Fed. Cir. 2005). Put differently,
"[c]anons of construction indicate that terms connected in the disjunctive [by the conjunction 'or']
be given separate meanings." Garcia v. United States, 469 U.S. 70, 73 (1984). Here,
PersonalWeb makes precisely this argument—that Amazon's proposed construction renders "the
presence of 'unauthorized' in Claim 20 [] superfluous and/or the word 'or' would be construed as
'and." See Opening Br. at 4. However, "[t]he preference for giving meaning to all terms [] is not
an inflexible rule that supersedes all other principles of claim construction." SimpleAir, Inc. v.
Sony Ericsson Mobile Commc'ns AB, 820 F.3d 419, 429 (Fed. Cir. 2016). Rather, "[t]he
construction that stays true to the claim language and most naturally aligns with the patent's
description of the invention will be, in the end, the correct construction." Id. at 430 (quoting
Phillips v. AWH Corp., 415 F.3d 430 1303, 1316 (Fed. Cir. 2005) (en banc)). Indeed, the
preference of giving meaning to all terms "is overcome where [] the evidence indicates that the
patentee used the two terms interchangeably." Baran v. Med. Device Techs., Inc., 616 F.3d 1309,
1316 (Fed. Cir. 2010) (upholding the district court's finding that the terms "releasably" and
"detachable" have the same meaning in the patent at issue).

Here, while PersonalWeb's argument in favor of separate meanings has superficial appeal, the intrinsic record reveals that the patentee used the words "authorized" and "licensed" interchangeably in the '310 patent. The specification is "the single best guide to the meaning of a disputed term." *Phillips*, 415 F.3d at 1315. As pointed out by Amazon, *see* Responsive Br. at 5, the '310 patent specification describes a "license table" that "records a relationship between a licensable data item and the user licensed to have access to it," *see* '310 Patent at 11:33–36. Each record in the license table includes the following: (1) a "True Name"—the "True Name of a data item subject to license validation"; and (2) a "**licensee**"—the "identify of a user **authorized** to have access to this object." *See* '310 Patent at 11:33–45 (emphasis added). In the same vein, the specification later describes "Track[ing] for Licensing Purposes," a "mechanism [to] ensure[] that **licensed files** are not used by **unauthorized parties**." *Id.* at 31:4–6 (emphasis added). The specification further provides that "[e]nforcing use of valid licenses can be active (for example, by

refusing to provide access to a file without authorization) or passive (for example, by creating a report of users who do not have proper authorization)." *Id.* at 31:9–12. Thus, the specification explicitly equates holding a "valid license" with "authorization." *See id.* (emphasis added).

In its reply brief, PersonalWeb responds that "Amazon's reference to the license table is unremarkable because PersonalWeb has not taken the position that a license is not a form of authorization." *See* Reply Br. at 7, ECF 420. That may be so. However, PersonalWeb's corollary argument—that "[j]ust because all licenses grant authorization does not mean that all authorizations are licenses," *see id.*, is without support. In other words, PersonalWeb's argument that the '310 patent contemplates authorizations not related to license status fails because the '310 patent is completely absent of any such more general authorizations. As previously discussed, PersonalWeb raises two purported examples of general, genus level authorizations: (1) "that a 'region' (directory) can be set as read-only, meaning another computer would not have permission to change the contents of the region"; and (2) that "[t]he specification [] discusses that a file can be locked so that another computer does not have permission to modify it." *See* Opening Br. at 2; '310 Patent at 10:23–35, 20:19–22. Amazon counters that these are merely "conventional [data] techniques . . . [and have] nothing to do with 'authorizing' access to content." *See* Responsive Br. at 7.

The Court agrees with Amazon. The plain language of claim 20 provides that the "unauthorized or unlicensed" determination is a prerequisite to "permitting [or not permitting] the content to be **provided to** or **accessed by** the at least one other computer." *See* '310 Patent at 39:24–31 (emphasis added). This determination informs whether to permit content to be provided or accessed, and thus does not encompass PersonalWeb's purported examples which concern modification/alteration. PersonalWeb states that "if the region (directory) or file at issue is read-only or locked, respectively then certain actions, such as altering them, are unauthorized." *See* Reply Br. at 8. This point is not in meaningful dispute. However, PersonalWeb goes on to argue that "[o]nce [a read-only flag or lock flag] is detected, the [next] step [under claim 20] is preventing access to make unauthorized alterations." *See id.* This argument is without merit. Claim 20 concerns whether "**the content** is unauthorized or

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unlicensed," not whether alterations to the content are unauthorized. See '310 Patent at 39:24–31 (emphasis added). Put differently, "read-only" and "lock" flags restrict modification, not access. Thus, "read-only" and/or "lock" flags do not form a basis under claim 20 to prevent access to content, because qualified content would be "provided" or "accessed" notwithstanding the presence of "read-only" and/or "lock" flags. Accordingly, PersonalWeb's "read-only" and "lock" flag examples are not evidence of more general, genus level content-access authorizations.

If anything, the remoteness of PersonalWeb's "read-only" and "lock" flag examples from having anything to do with content-access authorization demonstrates the merit of Amazon's proposed construction. Although a "patentee is free to choose a broad term and expect to obtain the full scope of its plain and ordinary meaning unless the patentee explicitly redefines the term or disavows its full scope," Thorner v. Sony Computer Ent. Am. LLC, 669 F.3d 1362, 1367 (Fed. Cir. 2012), here, as previously discussed, the specification explicitly and interchangeably uses the words "authorized" and "licensed" to describe the same concept—regulating access to licensed content. Thus, PersonalWeb's argument in favor of giving separate meaning to the different words "unauthorized" and "unlicensed" is unpersuasive. Baran, 616 F.3d at 1316.

PersonalWeb separately argues that "the prosecution history of the ['420]³ patent unambiguously shows that the patentee was not using the words 'authorized' to mean 'licensed,' but rather was using the term 'authorized' as a broader 'genus' term, and the term 'licensed' as a narrower 'species' term." See Opening Br. at 5. In support of this proposition, PersonalWeb cites to proposed claim amendments to the '420 patent in 2010 that split the term "unauthorized or unlicensed copy" into the term "unauthorized copy" in one proposed claim and the term "unlicensed copy" in a separate proposed claim. See 2/14/2010 Response to Final Office Action at 9–10, Ex. 3 to Thompson Decl., ECF 406-4. PersonalWeb's prosecution history argument fails for at least two independent reasons. First, the proposed claims identified by PersonalWeb were not included in the issued '420 patent and thus not part of the claimed invention. See generally '420 Patent. "An inventor in entitled to claim in a patent what [she] has invented, but no more."

³ PersonalWeb's opening brief describes the prosecution history as relating to the '442 patent; however, the recited excerpts are from the file history of the '420 patent.

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MySpace, Inc. v. GraphOn Corp., 672 F.3d 1250, 1256 (Fed. Cir. 2012). Here, the proposed claim amendments are not part of the claimed invention. Nor are the proposed claim amendments disclosed in the '420 patent specification, which is identical to the '310 patent specification.

Second, even if these claims had been issued, which they were not, "[c]laim differentiation cannot overcome . . . a contrary construction dictated by the written description or prosecution history."

Wi-LAN USA, Inc. v. Apple Inc., 830 F.3d 1374, 1391 (Fed. Cir. 2016) (internal quotation and citation omitted). As previously discussed, the Court finds that the patentee used "authorized" and "licensed" interchangeably in the specification. Accordingly, claim differentiation based on the proposed claim amendments would not control. Wi-LAN, 830 F.3d at 1391.

Finally, the Court notes that both parties discuss two *Markman* orders from the Eastern District of Texas involving some of the patents-in-suit in the instant action: (1) PersonalWeb Techs., LLC v. Amazon.com Inc., No. 6:11-cv-658, Dkt. No. 140 (E.D. Tex. Aug. 5, 2013) ("Davis Order"), Ex. 6 to Hadden Decl., ECF 412-7; and (2) PersonalWeb Techs., LLC v. IBM Corp., No. 6:12-cv-661-JRG, Dkt. No. 103 at 25, 28 (E.D. Tex. Mar. 11, 2016) ("Gilstrap Order"), Ex. 5 to Hadden Decl., ECF 412-6. PersonalWeb argues that neither the Davis Order nor the Gilstrap Order "is binding here." See Opening Br. at 6. The Court agrees. Neither order addressed the "unauthorized or unlicensed" term found in claim 20 of the '310 patent. Judge Davis declined to construe "licensed" and "unlicensed" as used in certain claims of the '442 patent. See Davis Order at 24–26. On the other hand, Judge Gilstrap construed "unlicensed" as used in claims 7 and 23 of the '442 patent to mean "invalid rights to content." See Gilstrap Order at 21, 25. Judge Gilstrap also construed the term "authorized" as used in claims 1, 2, and 16–19 of the '310 patent to mean "compliant with a valid license." See id. at 25, 28. Similarly, Judge Gilstrap construed "unauthorized" as used in claims 7 and 23 of the '442 patent to mean "not compliant with a valid license." See id. at 26, 28. While neither the Davis Order nor the Gilstrap Order is directly on point with the instant dispute, the Gilstrap Order is the closer of two and noted that "authorization' merely refers to a valid license," see Gilstrap Order at 28. The Court finds the Gilstrap Order persuasive and not inconsistent with the Court's ruling on the instant dispute.

In sum, the Court construes the disputed term "unauthorized or unlicensed" in claim 20 of

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the '310 patent as "not compliant with a valid license." Based on the foregoing analysis, the Court need not and does not address any remaining arguments raised by the parties with respect to this term.

2. "authorization" (claims 25 and 166 of '420 patent)

PersonalWeb's Proposal	Amazon's Proposal	Court's Construction
Plain and ordinary meaning	"a valid license"	"a valid license"
Alternatively: "permission"		

The parties' arguments with respect to the term "authorization" in claims 25 and 166 of the '420 patent are the same as the parties' arguments made with respect to the term "unauthorized or unlicensed" in claim 20 of the '310 patent. See Opening Br. at 1–9; Responsive Br. at 3–9; Reply Br. at 4–8. Accordingly, for the reasons set forth in Section IV.A.1 supra, the Court adopts Amazon's proposed construction "a valid license" for the term "authorization" in claims 25 and 166 of the '420 patent.

Additional disputed terms in the '310 and '420 patents

The parties dispute two additional terms in the '310 and '420 patents: (1) "the request including at least a content-dependent name of a particular data item" (in claim 20 of the '310 patent); and (2) "content-dependent name" (in claims 20 and 69 of the '310 patent and claim 25 of the '420 patent). Claim 20 of the '310 patent is representative of both terms and recites:

20. A computer-implemented method operable in a system which includes a plurality of computers, the method comprising:

controlling distribution of content from a first computer to at least one other computer, in response to a request obtained by a first device in the system from a second device in the system, the first device comprising hardware including at least one processor, the request including at least a content-dependent name of a particular data item, the content-dependent name being based at least in part on a function of at least some of the data comprising the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items will have the same contentdependent name,

based at least in part on said **content-dependent name** of said particular data item, the first device (A) permitting the content to be provided to or accessed by the at least one other computer if it is not determined that the content is unauthorized or unlicensed, otherwise, (B) if it is determined that the content is unauthorized or unlicensed, not permitting the content to be provided to or accessed by the at least one other computer.

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'310 Patent at 39:8–31 (emphasis added). The Court discusses each disputed term in turn.

"the request including at least a content-dependent name of a particular data item" (claim 20 of '310 patent)

PersonalWeb's Proposal	Amazon's Proposal	Court's Construction
"the request including at least	"the request including at least	No construction necessary
a content-dependent name of a particular data item"	a content-dependent name of a particular requested data item"	(PersonalWeb's proposal)

PersonalWeb's proposed construction is the claim language itself.⁴ See Opening Br. at 9. Amazon's proposed construction inserts a single word—"requested," such that the last portion of the disputed term reads "a particular **requested** data item." See Responsive Br. at 9 (emphasis added). Amazon points out that claim 20 of the '310 patent recites "controlling distribution of content from a first computer to at least one other computer, in response to a request [that includes a content-dependent name]." See id. at 10 (quoting claim 20). Amazon argues that therefore the purpose of claim 20 is "transferring data" and that "[e] very example of requesting data recited in the specification describes a match between the True Name and the [transferred] data." See id. Amazon's proposed construction would require that "the name in the request [] be [the name] for the content that is then distributed [(transferred)]," which Amazon asserts is the "only real dispute." See id. In other words, Amazon asserts that the content-dependent name of the particular data item in the request must match the name of the content that is controlled. See id.

PersonalWeb counters that "Amazon's proposed construction inserts a limitation that is not contained in the claim language and is therefore erroneous." See Opening Br. at 10. PersonalWeb's theory is that claim 20 "does not recite that content that is permitted to be provided to or accessed by the other computer is [necessarily] the particular data item [that is included in the request and has a content-dependent name]." See Reply Br. at 9–10 (emphasis in original). Rather, PersonalWeb argues, the patent specification and claim 20 contemplate controlling the distribution of content where the content being controlled does not match the content-dependent name of the particular data item in the request. See Opening Br. at 11; Reply

⁴ The Court has included a hyphen (that is not in dispute) found in the claim language but absent from the parties' proposed constructions.

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Br. at 10–11, Hearing Tr. at 38:1–7. In support, PersonalWeb points to the claim language, as well as portions of the specification containing at least one purported example of a particular data item in a request having a content-dependent name that is different than the content that is controlled. See Opening Br. at 10-11; Reply Br. at 10. For the reasons stated below, the Court finds that Amazon's proposed construction is not warranted, and that no construction is required.

"[C]laim terms must be given their plain and ordinary meaning to one of skill in the art." Thorner v. Sony Computer Ent. Am. LLC, 669 F.3d 1362, 1367 (Fed. Cir. 2012). A "patentee is free to choose a broad term and expect to obtain the full scope of its plain and ordinary meaning unless the patentee explicitly redefines the term or disavows its full scope." *Id.* On its face, claim 20 does not include the limitation proposed by Amazon and the Court does not find sufficient support in the remainder of the intrinsic record to implicitly read in such a requirement.

As an initial matter, the plain language of claim 20 contemplates content to be controlled that does not necessarily match the particular data item that is included in the request (and has its own content-dependent name). The method of claim 20 is directed to "controlling distribution of **content** from a first computer." See '310 Patent at 39:11 (emphasis added). However, this "content" does *not* serve as the antecedent basis for any portion of the disputed term "the request including at least a content-dependent name of a particular data item." See id. at 39:11–17. Rather, each element of the disputed term is introduced in claim 20 separate and apart from the "content" for which distribution is controlled. See id. Accordingly, on its face, claim 20 does not require that the request to include a content-dependent name of a particular data item match the name of the content to be controlled.

Amazon argues that its "construction is the only proposal that is true to the very purpose of the alleged invention"—to "name in the request [] the content that is then distributed." See Responsive Br. at 10, 11. The Court has no doubt that such practice is a preferred embodiment of the claimed method. However, patent claims are not limited to preferred or illustrated embodiments. See Electro Sci. Indus., Inc. v. Dynamic Details, Inc., 307 F.3d 1343, 1348-49 (Fed. Cir. 2002). Here, the plain claim language is broader than the embodiments cited by Amazon, see Responsive Br. at 11.

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At the Hearing, Amazon argued that "it [] doesn't make any sense" for the contentdependent name of the particular data item to be different than the content for which distribution is controlled, pointing out that the content-based name is used to determine whether the content itself is unauthorized or unlicensed. See Hearing Tr. at 43:19-23. The Court agrees that claim 20 mandates that "said content-dependent name of said particular data item" form at least part of the basis for whether the "content" may be provided to or accessed by the at least one other computer. See '310 Patent at 39:24–31. However, this claim limitation does not require that the contentdependent name of the particular data item *match* the content to be provided or accessed. Instead, a mere relationship between the content-dependent name of the particular data item and the content itself may be sufficient to form at least part of the basis for whether the "content" may be provided or accessed.

Moreover, a patentee is entitled to the full scope of its claim language "[a]bsent a clear disavowal [] in the specification or the prosecution history." Home Diagnostics, Inc. v. LifeScan, Inc., 381 F.3d 1352, 1358 (Fed. Cir. 2004). Here, having reviewed the patent specification, the Court finds no such clear disavowal concerning the instant disputed term.

With respect to the prosecution history, Amazon argues that "the Examiner specifically allowed the '310 patent to issue because it requires a specific relationship between a request for content (including a hash of the content), a licensing check based on that hash, and the response with the data to which the hash corresponds." See Responsive Br. at 10 (citing 6/24/2010 Notice of Allowance at 3–4, Ex. 7 to Hadden Decl., ECF 412-8). PersonalWeb counters that "the statements in a Notice of Allowance do not define the scope of the claims in an issued patent." Reply Br. at 11. The Court agrees with PersonalWeb—"an examiner's unilateral statement does not give rise to a clear disavowal of claim scope by the applicant." Alfred E. Mann Found. for Sci. Research v. Cochlear Corp., 841 F.3d 1334, 1341 (Fed. Cir. 2016). Amazon additionally argues that its proposed construction is "what PersonalWeb advocated when defending the '310 patent in inter partes review." See Responsive Br. at 10-11 (citing Patent Owner Response to IPR 2013-00596 at 5, Ex. 2 to Hadden Decl., ECF 412-3). However, as pointed out by PersonalWeb, see Reply Br. at 11, the cited portion of the IPR response concerns only claims 24 and 32 of the '310

patent, both of which fundamentally differ from claim 20. Accordingly, the Court is unpersuaded by Amazon's prosecution history arguments.

In sum, the Court rejects Amazon's proposed construction and finds that no construction is necessary, thus effectively adopting PersonalWeb's proposed construction which is identical to the claim language.

2. "content-dependent name" (claims 20 and 69 of '310 patent; claim 25 of '420 patent)

PersonalWeb's Proposal	Amazon's Proposal	Court's Construction
"an identifier that is generated	"an identifier used to locate	"an identifier that is generated
by processing at least some of	and access a data item that is	by processing all of and only
the sequence of bits" ⁵	generated by processing the	the sequence of bits"
_	sequence of bits [of the data	_
	item / of the particular data	
	item]"	

The disputed term "content-dependent name" appears in claim 20 of the '310 patent, which is representative. The Court notes that the parties agree that the term "data item" in claim 20 of the '310 patent should be construed as "sequence of bits." *See* Revised Joint Claim Construction and Prehearing Statement at 2, ECF 430; *see id.* at Appendix A. Accordingly, for clarity, the Court makes this substitution in claim 20, which recites in part:

... the request including at least a **content-dependent name** of a particular [sequence of bits], the **content-dependent name** being based at least in part on a function of at least some of the data comprising the particular [sequence of bits] . . . and wherein two identical [sequences of bits] will have the same **content-dependent name** . . .

'310 Patent at 39:15–22 (emphasis added).

The instant proposed construction sought by PersonalWeb is the "modified construction" offered by PersonalWeb at the Hearing. *See* Hearing Tr. at 52:18–53:12. Although different than the construction presented by PersonalWeb in its opening brief, PersonalWeb confirmed at the Hearing that it is seeking "this modified construction." *See id.* PersonalWeb's modified construction narrows the parties' dispute to the following: (1) whether Amazon's proposed inclusion of the words "used to locate and access a data item" is appropriate; and (2) whether to include the language "at least some of" before the words "the sequence of bits." The Court

⁵ Proposed "modified construction" offered by PersonalWeb at the Hearing. *See* Hearing Tr. at 52:18–53:12.

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addresses issues (1) and (2) in turn.

a. Issue (1): "used to locate and access a data item"

PersonalWeb argues that Amazon's proposed phrase "used to locate and access [a data item]" is "unrelated to anything found in the disputed terms." Opening Br. at 12. PersonalWeb contends that this phrase improperly "describe[s] what a content-dependent name is purportedly **used for**," not "what a content-dependent name is." *See id.* (emphasis in original). In other words, PersonalWeb argues, "[t]he manner or purpose for which the content-dependent name is used is not recited in the dispute[d] claims terms." *Id.* PersonalWeb also asserts that the specification provides examples in which a content-based name is **not** "used to locate and access" a data item. Id. In support, PersonalWeb points to a portion of the specification describing the "Retire True File" mechanism, which "allows a remote processor to indicate that it no longer plans to maintain a copy of a given True File," see '310 Patent at 24:1-18; see also Opening Br. at 13. Similarly, PersonalWeb points to the "Cancel Reservation" mechanism, which "allows a remote processor to indicate that it no longer requires access to a True File stored on the local processor," see '310 Patent at 24:19-30; see also Opening Br. at 13.

Amazon counters that its "construction recognizes that the claimed content-dependent names are identifiers used to locate and access data items in the distributed system." Responsive Br. at 11. In support, Amazon points out that the specification describes "an apparatus and a method for determining whether a particular data item is **present in the system or at a location** in the system," see '310 Patent at 3:59–61 (emphasis added), and a system that "provides transparent access to any data item by reference only to its identity and independent of its present location," see '310 Patent at 4:10–12 (emphasis added). Amazon also points out that PersonalWeb previously represented to the Federal Circuit that "[u]nlike the '310 patent, Woodhill [prior art] does not use the Binary Object Identifiers^[6] to locate or control access to any data item within a network—as the [PTAB] agreed." See PersonalWeb Brief at 10 (emphasis added), Dkt. No. 15 in Case No. 18-1599 (Fed. Cir. May 31, 2018), Ex. 3 to Hadden Decl., ECF 412-4; see also

⁶In the prior art, a "Binary Object Identifier" is a value based on the content of a binary object (such as a file or segment of a file). See Reply Br. at 6.

Responsive Br. at 12. In the same vein, PersonalWeb told the Federal Circuit that "[u]nlike True Names, [Woodhill] do[es] not use content-based identifiers to locate, identify, access, move, or synchronize Binary Objects found anywhere on the system (within individual files or across different files)." PersonalWeb Corrected Brief at 14, Dkt. No. 29 in Case No. 14-1602 (Fed. Cir. Nov. 12, 2014), Ex. 8 to Hadden Decl., ECF 412-9. Amazon contends that therefore PersonalWeb's instant proposed construction "contradicts what it told the PTAB and the Federal Circuit." *See* Responsive Br. at 12.

The Court disagrees with Amazon that claim 20 of the '310 patent includes Amazon's

The Court disagrees with Amazon that claim 20 of the '310 patent includes Amazon's proposed "used to locate and access a data item" limitation. First, the plain language of claim 20 does not require or suggest such a limitation. Second, Amazon's proposed construction is not directed to what the identifier (content-dependent name) is, but rather one possible use of the identifier (content-dependent name). While Amazon argues that identity and use are one and the same for this term, *see* Hearing Tr. at 57:23–58:14, the Court is unpersuaded by Amazon's narrow view that the identifier (content-dependent name) may only be "used to locate and access a data item." Certainly, the specification describes a preferred embodiment that does just that. *See*, *e.g.*, '310 Patent at 3:59–4:12. However, as pointed out by PersonalWeb, *see* Opening Br. at 13, the specification also contemplates embodiments that use a content-based name to effect a *lack* of access to a file, *see* '310 Patent at 24:1–30. PersonalWeb argues in its reply brief that Amazon "does not address" these teachings of the specification. *See* Reply Br. at 11. The Court agrees. Thus, Amazon's proposed phrase "used to locate and access a data item" constitutes an "improper [] limitation[] from a preferred embodiment described in the specification," *see Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

The Court recognizes that the full scope of the claim language may be overcome by "a clear disavowal [in] the prosecution history." *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1358 (Fed. Cir. 2004). Here, however, Amazon's citations to the prosecution history do not demonstrate such clear disavowal. Rather, the patentee's statements to the Federal Circuit could be read as clarifying that the Woodhill prior art does not cover a preferred embodiment (the "used to locate and access" embodiment), without disavowing other embodiments. Indeed, the patentee

argued to the Federal Circuit that unlike the '310 patent, the Woodhill identifiers are not used to "to locate, identify, access, move, *or* synchronize" all files found anywhere on the system. *See* PersonalWeb Corrected Brief at 14 (emphasis added), Dkt. No. 29 in Case No. 14-1602 (Fed. Cir. Nov. 12, 2014), Ex. 8 to Hadden Decl., ECF 412-9. This statement contemplates uses different from "locate and access," and thus does not limit the '310 patent's identifiers (content-dependent names) as Amazon contends.

In sum, the Court rejects Amazon's proposal to include the phrase "used to locate and access a data item" in the construction of the disputed term "content-dependent name."

b. Issue (2): "at least some of"

PersonalWeb seeks to include the language "at least some of" (which matches language in claim 20 of the '310 patent) before the words "the sequence of bits" in the parties' proposed constructions—i.e., "an identifier that is generated by processing **at least some of** the sequence of bits." *See* Hearing Tr. at 52:18–53:12 (emphasis added). On the other hand, Amazon's proposed construction would simply read "an identifier [] that is generated by processing the sequence of bits." *See* Responsive Br. at 11.

The "at least some of" issue is more complex than it appears at first blush. The core dispute is actually whether the identifier (content-dependent name) must depend "on all of the data in the data items and only on the data in the data items." *See* Responsive Br. at 13 (quoting '310 Patent at 1:46–48). PersonalWeb asserts that Amazon's proposed construction is "misleading" because it does not actually cover the "all and only" limitation advanced by Amazon in its briefing. *See* Reply at 12–13. The Court agrees that Amazon's proposed construction, if adopted as is, would not technically require the identifier to depend on "all and only" the data in the data items (sequences of bits) of claim 20. However, the Court will construe the disputed term in a manner that resolves the parties' core dispute. The Court notes that the same "all and only" dispute underlies disputed terms eight ("being based on a first function of the contents of the specific part") and nine ("part value"). *See* Opening Br. at 17–18; Responsive Br. at 18–20. Accordingly, here, the Court will also address portions of the parties' arguments concerning terms eight and nine. As discussed below, the Court ultimately finds that the "all and only" limitation is

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required by claim 20⁷ of the '310 patent.

As an initial matter, the Court notes that the plain language of claim 20 sets forth "the content-dependent name being based at least in part on a function of at least some of the data comprising the particular data item [(sequence of bits)]." See '310 Patent at 39:16–17 (emphasis added). Thus, according to the claim language, it would appear that only "some of the data" comprising the data item (sequence of bits) need be processed. See id. However, claim 20 goes on to require that "two identical data items [(sequences of bits)] will have the same contentdependent name." Id. at 39:20–22 (emphasis added). Read in the light of the prosecution history (discussed below), the Court finds that this explicit requirement of claim 20 implicitly requires that the content-dependent name be based on "all and only" the data in the data items.

PersonalWeb argues (1) that the specification discloses embodiments that do not depend on "all and only" the data in the data items; (2) that Amazon's citation to the prosecution history "is taken out of context"; and (3) that the doctrine of claim differentiation supports PersonalWeb's construction. See Reply Br. at 13, 15. The Court addresses each point in turn.

i. **Specification**

First, PersonalWeb argues that "[a]lthough a preferred embodiment is 'all and only," other embodiments need only process enough data to make the identifier "sufficiently unique to prevent multiple files from being assigned the same identifier." See Reply Br. at 13 (citing columns 12 and 13 of the '310 patent specification). PersonalWeb further argues that "the specification discloses that while the preferred embodiment uses a True Name that was based only upon the data of a data item to track the content, other embodiments could use a content-based identifier that used more than the content of a data item." Reply Br. at 2. In support, PersonalWeb cites the following portion of the specification: "While the invention is described herein as using the True Name of a data item as the identifier for the data item, other preferred embodiments use tagged, typed, categorized or classified data items and use a combination of both the True Name and the tag, type, category or class of the data item as an identifier." '310 Patent at 13:17–22.

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⁷ As well as claim 69 of the '310 patent and claim 25 of the '420 patent, which are presented here alongside claim 20 of the '310 patent.

Meanwhile, Amazon contends that its proposed construction "requires simply what the patent teaches—that an identifier for a data item should be created from the data in that item." *See* Responsive Br. at 13. In support, Amazon cites to the portion of the specification that states "[t]his invention relates to data processing systems . . . wherein data items are identified by substantially unique identifiers which depend on all of the data in the data items and only on the data in the data items." '310 Patent at 1:44–48; *see* Responsive Br. at 13. The Court agrees with PersonalWeb that the specification discloses (at column 13:17–22) at least one embodiment with a content-based identifier that does not depend on "all and only" the data in the data items. Thus, the *specification* does not clearly disavow the scope of the disputed term, and the Court turns to the prosecution history. *LifeScan*, 381 F.3d at 1358.

ii. Prosecution history

Second, the Court analyzes Amazon's citation to the prosecution history. Amazon's citation to the prosecution history concerns U.S. Patent No. 5,978,791 ("the '791 patent"), which is a parent to all of the patents-in-suit. *See* Responsive Br. at 2–3, 19. "[P]rosecution history disclaimer in a parent application may bind continuation or continuation-in-part applications, if they involve the same claim limitation." *Profoot, Inc. v. Merck & Co., Inc.*, 663 Fed. App'x 928, 933 n.2 (Fed. Cir. 2016). Put differently, "[w]hen the application of prosecution disclaimer involves statements from prosecution of a familial patent relating to the same subject matter as the claim language at issue in the patent being construed, those statements in the familial application are relevant in construing the claims at issue." *Ormco Corp. v. Align Tech., Inc.*, 498 F.3d 1307, 1314 (Fed. Cir. 2007) (finding prosecution history of parent relevant in construing claims of four child patents that involved the same content). Here, the '791 patent involves the same content (and has the identical shared specification) as the patents-in-suit. Accordingly, the Court finds the prosecution history of the '791 patent applicable—which PersonalWeb does not dispute.

Amazon points to the patentee's August 29, 1997 Response to Office Action regarding the '791 patent. *See* Responsive Br. at 19. Specifically, Amazon points out that patentee stated:

[I]f a system determines an identifier using all of the data in a data item as well as something else, then that system does not determine the identifier using only the

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data in the data item. And, if a system determines an identifier using only some of the data in a data item, even if it uses nothing else to determine the identifier, that system does not determine the identifier using all the data in the data item.

See 8/29/1997 Response to Office Action ("Office Action Response") at 10 (emphasis in original), File History of '791 Patent, Ex. 1 to Hadden Decl., ECF 412-2; see also Responsive Br. at 19. Patentee made these statements in the context of amending claims. The amended claims in the Office Action Response include the following language: "the identifier being determined using and depending on all of the data in the data item and only on the data in the data item, whereby two identical data items in the system will have the same identifier." See Office Action Response at 1–2 (emphasis added and removed).

Patentee explained that when an identifier depends on and is determined using "all of the data in the data items and **only** [] the data in the data items," then "[a] notable and significant property of this invention is that, in any particular system, two identical data items in the system will have the same identifier." Office Action Response at 8 (emphasis in original). Patentee further explained that "if something other than the data item changes (e.g., if some data in another data item changes or if a file name of the data item or of another data item changes), then the identifier should not change (because it is only the data in the data item that is used to determine the identifier). *Id.* at 9 (emphasis added). In other words, if two identical data items have different contextual information, the data items will nonetheless "have the same identifier." See id. at 10.

Amazon contends that these prosecution disclaimers require identifiers that are based on "only [the] data in the data item." See Responsive Br. at 19. PersonalWeb counters that Amazon's citation to the prosecution history "is taken out of context" and does not concern the claims presently at issue. See Reply Br. at 15. Rather, PersonalWeb argues, "[t]he applicants were responding [to] a rejection of claims that expressly recited 'all and only' limitations." Id. (emphasis in original). The Court acknowledges that the amended claims in the Office Action Response recite "all and only" limitations. Nonetheless, PersonalWeb's argument is misplaced. The Office Action Response explicitly provides that "if two data items are identical (i.e., contain exactly the same data), they will have the same identifier," see Office Action Response at 9, and that this "notable and significant property" results precisely because the identifiers depend on and

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are determined using "all of the data in the data items and [] only the data in the data items," see id. at 8 (emphasis in original). Here, claim 20 of the '310 patent explicitly requires that "two identical data items will have the same content-dependent name." '310 Patent at 39:20–22. The amended claims of the Office Action Response include the same limitation—that "two identical data items in the system will have the same identifier." See, e.g., Office Action Response at 2 (emphasis added). As the prosecution history makes clear, this limitation is a feature of using "all and only" the data in the data items.

PersonalWeb argues that the specification's disclosure of "other embodiments [that] use a contend-based identifier [based on] more than the content of a data item" should control. See Reply at 2, 13 (citing specification at column 13:17–22). However, the patentee distinguished prior art that makes use of information other than the data in the data item—"Gramlich [prior art] does not determine the name of the data item using only the data in the data item." See Office Action Response at 13 (emphasis added and in original). Indeed, if the identifier (contentdependent name) of claim 20 changes as a function of information other than the data in the data item, then two identical data items in the system may not have the same identifier as expressly required by claim 20. Accordingly, the "other embodiments" raised by PersonalWeb do not comport with the requirements of claim 20.

Finally, the Court notes that inclusion of the "all and only" limitation is consistent with Judge Gilstrap's reasoning in *PersonalWeb Techs.*, LLC v. IBM Corp., No. 6:12-cv-661-JRG, Dkt. No. 103 (E.D. Tex. Mar. 11, 2016) ("Gilstrap Order"), Ex. 5 to Hadden Decl., ECF 412-6); see also Responsive Br. at 19 (discussing portions of the Gilstrap Order). Judge Gilstrap included the "all and only" limitation in construing terms in separate claims, based in part on "the definitive" statements by the patentee during prosecution [of the '791 patent]." See Gilstrap Order at 15–18, 19 (citing and discussing the same prosecution history from the '791 patent raised by Amazon in the instant action). Thus, the Court is not alone in its reading of the prosecution history.

Accordingly, the Court finds "a clear disavowal [of the full scope of the claim] [in] the prosecution history." LifeScan, 381 F.3d at 1358. Therefore, the Court agrees with Amazon that the identifier (content-dependent name) of claim 20 includes the "all and only" limitation.

iii. Claim differentiation

Third, PersonalWeb argues that its proposed construction should control under the doctrine of claim differentiation because dependent claim 27 of the '310 patent recites "'[t]he method of claim 20 wherein the content-dependent name of the particular data item is based on a function of only the data comprising the particular data item." *See* Reply Br. at 13 (quoting '310 Patent at 40:35–37). However, "[c]laim differentiation cannot overcome . . . a contrary construction dictated by the [] prosecution history." *Wi-LAN USA, Inc. v. Apple Inc.*, 830 F.3d 1374, 1391 (Fed. Cir. 2016) (internal quotation and citation omitted). As previously discussed, the Court finds the "all and only" limitation mandated by the prosecution history. Accordingly, PersonalWeb's claim differentiation argument is of no avail.

c. Conclusions re the disputed term "content-dependent name"

In conclusion, the Court rejects Amazon's proposed inclusion of the phrase "used to locate and access a data item" in the disputed term "content-dependent name." However, the Court agrees with Amazon that its proposed "all and only" limitation is mandated by the intrinsic record. Accordingly, the Court construes the disputed term "content-dependent name" as "an identifier that is generated by processing all of and only the sequence of bits."

C. Disputed term in the '442 patent

The parties dispute one term in the '442 patent—"name for a data file" in claim 10. The parties' proposed constructions are set forth below.

1. "name for a data file" (claim 10 of '442 patent)

PersonalWeb's Proposal	Amazon's Proposal	Court's Construction
"an identifier of a data file"	"an identifier used to locate	"an identifier of a data file"
	and access a data file"	

The instant proposed construction sought by PersonalWeb is the "modified proposal" offered by PersonalWeb at the Hearing. *See* Hearing Tr. at 65:10–14. The parties' proposed constructions differ in that Amazon seeks to include the same "used to locate and access" limitation proposed by Amazon with respect to the disputed term "content-dependent name." *See*

⁸ Modified construction offered by PersonalWeb at the Hearing. *See* Hearing Tr. at 65:10–14.

1 Responsive Br. at 11. In analyzing "content-dependent name," the Court rejected Amazon's proposed inclusion of the phrase "used to locate and access." See Section IV.B.2.a supra. The 2 3 parties rely on the same arguments with respect to the instant disputed term "name for a data file." See Opening Br. at 13–14; Responsive Br. at 11–13. Accordingly, for the reasons discussed in 4 Section IV.B.2.a *supra*, the Court rejects Amazon's proposed inclusion of the phrase "used to 5 locate and access" and therefore adopts PersonalWeb's proposed construction "an identifier of a 6 7 data file" for the disputed term "name for a data file" in claim 10 of the '442 patent. 8 D. Disputed terms in the '544 patent 9 The parties dispute five terms in the '544 patent. Some of the terms appear in claim 52 of the '544 patent; all five terms appear in claim 46 of the '544 patent, which recites: 10 46. A computer-implemented method comprising: 11 (A) for each particular file of a plurality of files: 12 (a[1]) determining a particular **digital key for the particular file**, wherein 13 the particular file comprises a first one or more parts, each part of said first one or more parts having a corresponding part value, 14 the part value of each specific part of said first one or more parts being based 15 on a first function of the contents of the specific part, wherein two identical parts will have the same part value as determined by the first function, and wherein the particular digital key for the particular file is determined using a second function of the one or more of part values of said first one or more parts; and (a2) adding the particular digital key of the particular file to a database, the database including a mapping from digital keys of files to information about the corresponding files; 21 22

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(B) determining a search key based on search criteria, wherein the search criteria comprise a second one or more parts, each of said second one or more parts of said search criteria having a corresponding part value, the part value of each specific part of said second one or more parts being based on the first function of the contents of the specific part, and wherein the search key is determined using the second function of the one or more of part values of said second one or more parts;

- (C) attempting to match the search key with a digital key in the database; and
- (D) if the search key matches a particular digital key in the database, providing information about the file corresponding to the particular digital key.

'544 Patent at 43:4–37 (emphasis added). The Court discusses each disputed term in turn.

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1. "digital key for the particular file" (claim 46 of '544 patent); "file key for each particular file" (claim 52 of '544 patent)

PersonalWeb's Proposal	Amazon's Proposal	Court's Construction
"a content-based identifier for [the/each] particular file"	"unique identifier used to locate [the/each] particular file"	"a content-based identifier for [the/each] particular file"
	Alternatively: "unique identifier that locates [the/each] particular file" 9	

The disputed term "digital key for the particular file" appears in claim 46 of the '544 patent; the disputed term "file key for each particular file" appears in claim 52. The parties' proposed constructions cover both terms. The parties' dispute consists of two issues: (1) whether inclusion of Amazon's proposed "used to locate" or "that locates" language is warranted; and (2) whether a key must be "unique." *See* Opening Br. at 15; Responsive Br. at 14.

The parties' arguments regarding issue (1) mirror the parties' arguments on Amazon's proposed "used to locate and access" language with respect to the disputed term "contentdependent name." Here, PersonalWeb argues that Amazon's proposed "used to locate" phrase is inapposite "for the same reasons discussed above in connection with the 'content-dependent name' terms." Opening Br. at 15. Likewise, Amazon advances its position here "[a]s discussed above for the terms 'content-dependent name' and 'name for a data file.'" Responsive Br. at 14. Thus, for the reasons discussed in Section IV.B.2.a supra, the Court rejects Amazon's proposal to include the phrase "used to locate" in the instant disputed term. Amazon's alternative proposal to include the phrase "that locates" is likewise unavailing. Framed in this manner, Amazon's proposed construction still constitutes an "improper [] limitation[] from a preferred embodiment described in the specification," see Liebel-Flarsheim, 358 F.3d at 913; see also Section IV.B.2.a supra. Moreover, Amazon's concerns are addressed in part by the full context of claim 46—e.g., that the "digital key of the particular file [is added] to a database, the database including a mapping from digital keys of files to information about the corresponding files." '544 patent at 43:19–22. Accordingly, the Court rejects Amazon's proposed "used to locate"/"that locates" phrase.

⁹ As proposed by Amazon at the Hearing. *See* Hearing Tr. at 72:12–16.

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Turning to issue (2), PersonalWeb argues that Amazon's proposed construction "that the identifier must be 'unique' is inconsistent with the claim language and the specification." Opening Br. at 15. PersonalWeb contends that while claims 46 and 52 require that "two identical parts will have the same part value," it is nonetheless "impossible to guarantee that different inputs will always produce different, i.e., unique, outputs." See id. In other words, according to PersonalWeb, these claims "require[] that the same content yields the same output, not that the output in unique." Id. In support, PersonalWeb points to the specification at 12:52–13:9, which states in part that "[i]t is impossible to define a function having a unique output for each possible input when the number of elements in the range of the function is smaller than the number elements in its domain," see '310 Patent at 12:52–55. Amazon counters that for the invention to work, "the identifier must be sufficiently unique to prevent multiple files from being assigned the same identifier." Responsive Br. at 15. Amazon argues that "after a digital key or file key is created, it is added to a database and mapped to its corresponding file information, i.e. it is a oneto-one correspondence." Id. In other words, Amazon argues that "[i]n the context of a database, a 'key' represents a unique identifier used to locate a record in a database." Id.

The Court agrees with PersonalWeb that it would be improper to include the word "unique" in construing the instant disputed term. As PersonalWeb points out, the specification explicitly provides that true uniqueness "is impossible" in computing True Names, see '310 Patent at 12:47–13:9. Indeed, Amazon tacitly acknowledges that the patents-in-suit refer to "sufficient" uniqueness. See Responsive Br. at 15. Thus, inclusion of the word "unique" would improperly limit the claim language as guided by the specification. Moreover, inclusion of the word "unique" may mislead the jury into applying a commonly understood meaning of the word "unique" rather than a meaning informed by the intrinsic record, see Phillips, 415 F.3d at 1316. Regarding Amazon's argument that the claimed invention would not work without a "unique identifier," the surrounding claim language provides sufficient context regarding what is necessary under the claimed methods of claim 46 and 52, respectively. Accordingly, the Court rejects Amazon's proposed inclusion of the word "unique."

In sum, the Court adopts PersonalWeb's proposed construction "a content-based identifier

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for [the/each] particular file" for the disputed terms "digital key for the particular file" (claim 46 of '544 patent) and "file key for each particular file" (claim 52 of '544 patent).

"part" (claims 46 and 52 of '544 patent)

PersonalWeb's Proposal	Amazon's Proposal	Court's Construction
"a separate sequence of bits"	"a separate sequence of bits within a file"	"a separate sequence of bits within a file"

The disputed term "part" appears in claims 46 and 52 of the '544 patent. Amazon's original proposed construction was "a sequence of bits within a file." See Responsive Br. at 15. However, Amazon's briefing indicates acceptance of PersonalWeb's proposed inclusion of the word "separate," see id. at 17 n.3, as confirmed at the Hearing, see Hearing Tr. at 79:4–9. Thus, the only remaining issue with respect to this term is whether Amazon's proposed "within a file" language is warranted.

PersonalWeb argues that its proposed construction flows from an agreed-upon construction for the term "wherein the particular file comprises a first one or more parts" (claim 46 of '544 patent): "wherein the particular file is made up of a first one or more separate sequences of bits." See Opening Br. at 15–16 (emphasis in original); see also Revised Joint Claim Construction and Prehearing Statement at 2, Appendix A, ECF 430. On this point, Amazon counters that "[t]he [instant] dispute between the parties is about where the sequences of bits come from (i.e., are they part of 'the particular file'), not whether a part is a sequence of bits." Responsive Br. at 17. The Court agrees that Amazon is not bound by its agreed-upon construction to a separate term that does not encompass the instant dispute.

PersonalWeb next argues that "the [particular] file [as recited in claims 46 and 52] itself as a whole is a sequence of bits" and that PersonalWeb's proposed construction "seeks to clarify that [the file] is made up of separate parts." Opening Br. at 16. Amazon agrees that a "part" is a separate sequence of bits but seeks to add that "a 'part' as used in the '544 patent is a portion of a larger file." See Responsive Br. at 17. Specifically, Amazon argues that a "part" must be "a part" of "the particular file" of the claim. See id. In support, Amazon points out that "[e]very independent claim of the '544 patent recites a singular data item [(a particular file)] comprising parts." See id. (discussing claims 1, 46, and 52 of the '544 patent). Amazon further argues that

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the claims "closely track th[e] compound data item embodiment" of the specification. See id. at 15–16. PersonalWeb counters that partitioning "a larger object is [but] a specific teaching of one embodiment in the specification" and that the specification also teaches partitioning "[a] complex digital object [] formed from many parts that are themselves digital objects comprised of a sequence of bits." See Reply at 14.

The Court agrees with Amazon. As PersonalWeb explained to the Federal Circuit, the identifiers of the '544 patent are created via a "hash of hashes" by applying a function to parts of a file to create part values and then applying a function to the part values to obtain the key. See PersonalWeb Corrected Brief at 72, Dkt. No. 29 in Case No. 14-1602 (Fed. Cir. Nov. 12, 2014), Ex. 8 to Hadden Decl., ECF 412-9 (arguing that claim 1 "requires: (a) separating a 'data item' into a 'plurality of parts'; (b) applying a hash function to each part to obtain a 'value' for each part; and (c) applying a second hash function to the 'value' of each part to obtain a value for the 'data item' as a whole"). Here, PersonalWeb argues that the claims are "[not] limited to the specific embodiment disclosed in the specification." See Reply Br. at 14. However, PersonalWeb offers no support in the intrinsic record to contradict Amazon's proposed construction.

"An inventor in entitled to claim in a patent what [she] has invented, but no more." MySpace, Inc. v. GraphOn Corp., 672 F.3d 1250, 1256 (Fed. Cir. 2012). Amazon's proposed construction is consistent with the plain claim language—that a "part" is a part of "the particular file." See, e.g., '544 Patent at 43:5–10. Amazon's proposed construction is likewise consistent with other portions of the intrinsic record. See, e.g., '310 Patent at 13:46–59; PersonalWeb Corrected Brief at 72. PersonalWeb fails to point out a portion of the specification that discloses a broader reading. Moreover, PersonalWeb's reply brief seemingly confirms Amazon's proposed construction—PersonalWeb asserts that "[t]he requirement that the file has 'one or more parts' adequately defines where the parts come from," see Reply Br. at 14. This statement by PersonalWeb supports a reading that the parts "come from" (i.e. are within) the particular file.

Accordingly, the Court adopts Amazon's proposed construction "a separate sequence of bits within a file" for the disputed term "part" in claims 46 and 52 of the '544 patent.

3. "being based on a first function of the contents of the specific part" (claim 46 of '544 patent)

PersonalWeb's Proposal	Amazon's Proposal	Court's Construction
Plain and ordinary meaning	"being based on a computation where the input	"being based on a computation where the input
Alternatively: "being based upon a first computation using the data of the specific part"	is only all of the data in the specific part" ¹⁰	is only all of the data in the specific part"

4. "part value" (claims 46 and 52 of '544 patent)

PersonalWeb's Proposal	Amazon's Proposal	Court's Construction
"a value created by a	"a value created by a	"a value created by a
computation using the	computation only on the	computation only on the
sequence of bits that makes	sequence of bits that makes	sequence of bits that makes
up the part"	up the part" ¹¹	up the part"

The disputed terms "being based on a first function of the contents of the specific part" and "part value" both appear in claim 46 of the '544 patent (the latter term also appears in claim 52). In their briefing the parties addressed both terms in parallel. *See* Opening Br. at 17–18; Responsive Br. at 18–20; Reply Br. at 15. Likewise, the parties discussed both terms together at the Hearing. *See* Hearing Tr. at 89:7–14. Indeed, the core dispute over these terms is identical—whether a "part value" can be based on something other than the data of the part (as PersonalWeb contends), or whether the part values must be based on "all of the data in the data items and only on the data in the data items" (as Amazon contends). *See* Opening Br. at 18; Responsive Br. at 18.

At the Hearing, Amazon modified its proposed constructions of these two terms to include the "only" limitation advocated by Amazon in its briefing. *See* Hearing Tr. at 95:2–16; *see also* Responsive Br. at 18–19. In support of its proposed constructions, Amazon cites the prosecution history of the '791 patent for the proposition that claims 46 and 52 of the '544 patent require identifiers that are based on "only [the] data in the data item." *See* Responsive Br. at 19. In other words, Amazon's argument here is effectively the same as Amazon's argument with respect to the disputed term "content-dependent name" in claim 20 of the '310 patent. Likewise, PersonalWeb's arguments here match its arguments with respect to "content-dependent name." *See* Reply Br. at 15.

¹⁰ As modified by Amazon at the Hearing. See Hearing Tr. at 95:2–16.

¹¹ As modified by Amazon at the Hearing. *See* Hearing Tr. at 95:2–16.

Like claim 20 of the '310 patent, claims 46 and 52 of the '544 patent require a direct match between the identifier and the content: the requirement that "two identical parts will have the same part value." *See* '544 Patent at 43:14–15, 44:16–18. This requirement mirrors the patentee's prosecution disclaimer that "two identical data items in the system will have the same identifier." *See*, *e.g.*, Office Action Response at 2 (emphasis added). As discussed more fully in Section IV.B.2.b *supra*, this limitation is a feature of using "all and only" the data in the data items. Accordingly, based on the cited prosecution history of the '791 patent, the Court reaches the same conclusion for the instant disputed terms—that the "all and only" limitation is mandated by the intrinsic record. *See* Section IV.B.2.b *supra*. Thus, the Court adopts Amazon's proposed constructions for the disputed terms "being based on a first function of the contents of the specific part" and "part value," respectively.

5. "function of the one or more of part values" (claim 46 of '544 patent)

PersonalWeb's Proposal	Amazon's Proposal	Court's Construction
"computation using the one or	"computation where the input	"computation where the input
more part values" ¹²	is only the one or more part	is only the one or more part
	values"	values"

The disputed term "function of the one or more of part values" appears in claim 46 of the '544 patent. Both parties presented modified proposed constructions at the Hearing.

PersonalWeb's modified construction is "computation using the one or more part values." *See*Hearing Tr. at 102:6–8. PersonalWeb made this change "for the same reasons as the other[]

[disputed terms] in which we propose 'using,' so that there's no implicit limitation of 'only.'" *See*id. at 102:8–10. Meanwhile, Amazon modified its proposed construction to include the word
"only," *see* Hearing Tr. at 104:17–105:12, to reflect Amazon's position that "[a]s with the other patents in suit, the resulting identifiers [of the '544 patent] depend solely on the data that makes up the data item: no more, and no less," *see* Responsive Br. at 21.

As the parties recognized at the Hearing, the Court's construction of the instant term follows the Court's construction of the terms "content-dependent name," "being based on a first function of the contents of the specific part," and "part value." Indeed, the instant disputed term

¹² As modified at the Hearing. *See* Hearing Tr. at 102:6–8.

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reads "function of the one or more part values" without reciting any additional inputs, see '544 patent at 43:16–17 (emphasis added), which would limit the inputs to part values. Moreover, the Court previously construed "part value" as "a value created by a computation only on the sequence of bits that makes up the part." See Section IV.D.4 supra. Accordingly, the Court adopts Amazon's proposed construction "computation where the input is only the one or more part values" for the disputed term "function of the one or more of part values" in claim 46 of the '544 patent. //

United States District Court Northern District of California

V. ORDER

As set forth above, the Court construes the disputed terms as follows:

"unauthorized or unlicensed" ('310 Patent, claim 20) "authorization" ('420 Patent, claims 25 and 166) "the request including at least a content-dependent name of a particular data item" ('310 Patent, claim 20) "content-dependent name" ('310 Patent, claims 20 and 69) ('420 Patent, claims 20 and 69) ('420 Patent, claims 20 and 69) ('420 Patent, claim 25) "name for a data file" ('442 Patent, claim 10) "digital key for the particular file" ('544 patent, claims 46 and 52) "part" ('544 patent, claims 46 and 52) "being based on a first function of the contents of the specific part" ('544 Patent, claims 46 and 52) "being based on a first function of the contents of the specific part" ('544 Patent, claims 46 and 52) "a value created by a computation only on the sequence of bits that makes up the part" ('544 Patent, claims 46 and 52) "function of the one or more of part values" "computation where the input is only the one or more part values" "computation where the input is only the one or more part values"	Claim Term	Court's Construction
"authorization" ('420 Patent, claims 25 and 166) "the request including at least a content-dependent name of a particular data item" ('310 Patent, claim 20) "content-dependent name" ('310 Patent, claims 20 and 69) ('420 Patent, claim 25) "name for a data file" ('442 Patent, claim 10) "digital key for the particular file" ('544 patent, claims 46 and 52) "part" ('544 patent, claims 46 and 52) "being based on a first function of the contents of the specific part" ('544 Patent, claim 46) "part value" ('544 Patent, claims 46 and 52) "function of the one or more of part values" "a valid license" No construction necessary No construction necessary "an identifier that is generated by processing all of and only the sequence of bits" "an identifier of a data file" "a content-based identifier for [the/each] particular file" "a content-based identifier for [the/each] particular file" "a separate sequence of bits within a file" "being based on a computation where the input is only all of the data in the specific part" ('544 Patent, claims 46 and 52) "function of the one or more of part values" "computation where the input is only the one		
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		"computation where the input is only the one
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('544 Patent, claim 46)	('544 Patent, claim 46)	1

In addition, the Court adopts the following constructions that the parties agreed to in their Revised Joint Claim Construction and Prehearing Statement:

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BETH LABSON FREEMAN United States District Judge